

What is claimed is:

1. A system for producing a custom-made garment using specification data for a customer, comprising:
 - a base pattern capable of accepting inspection marks and mark lines, the mark lines being in accordance with design and fit preferences of the customer;
 - a scanning system for producing an image of the marked base pattern; and
 - a computer system that receives the image of the marked base pattern from the scanning system and determines the locations of the inspection marks and the mark lines therefrom.
2. The system according to claim 1, wherein the computer system is adapted to: generate image data received from the scanning system in a specified file format.
3. The system according to claim 2, wherein the computer system is further adapted to associate the image data with the customer.
4. The system according to claim 3, wherein the computer system is further adapted to store the image data in a database.
5. The system according to claim 1, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines associated with the base pattern.
6. The system according to claim 1, wherein the inspection marks and the mark lines are made using at least one of a non-erasable medium and a non-removable thread.
7. The system according to claim 1, wherein the inspection marks and the mark lines are made using a highly visible medium.

8. The system according to claim 7, wherein the highly visible medium is one of a Chako Pen, chalk and ink.

9. The system according to claim 8, wherein the Chako Pen, the chalk and the ink are each any color.

10. The system according to claim 8, wherein the highly visible medium is one of an erasable and a naturally disappearing medium.

11. The system according to claim 1, wherein the computer system is adapted to generate the specification data from the image, the specification data representing a design of the base pattern as adjusted by the mark lines and in relation to a distance from the inspection marks.

12. The system according to claim 11, wherein the specification data further represents tailor parameters, wherein the tailor parameters are manually entered into the computer system.

13. The system according to claim 11, wherein the specification data utilize a three-dimensional coordinate system.

14. The system according to claim 11, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines, all associated with the base pattern.

15. The system according to claim 14, wherein generating the specification data includes creating X-Y coordinate data of the mark lines using the inspection mark to construct imaginary X-Y axes and associated imaginary X-Y grid.

16. The system according to claim 11, wherein the computer system stores the generated specification data in a database.

17. The system according to claim 16, wherein the database further stores information about the customer, and associates the specification data with the customer.

18. The system according to claim 17, wherein the information about the customer includes at least one of a customer ID, a try-on garment ID, a base-pattern ID, and a sample garment ID.

19. The system according to claim 11, further comprising a cutting system adapted to receive the specification data, cut fabric using the specification data of the adjusted base pattern, and inspect the cut fabric using the specification data.

20. The system according to claim 19, wherein the cutting system is further adapted to inspect the cut fabric using at least one of the design of the base pattern, the image of the marked base pattern, and the locations of the inspection marks and the mark lines.

21. The system according to claim 19, wherein the cutting system includes an automated cut and sew machine.

22. The system according to claim 21, wherein the automated cut and sew machine includes a recognition camera and an optional ink jet head attachment.

23. The system according to claim 22, wherein the automated cut and sew machine recognizes a warp/weft thread direction and a placement position of fabric placed there within using the recognition camera.

24. The system according to claim 19, wherein the cutting system is further adapted to, prior to cutting the fabric, mark the fabric using the specification data and verify the accuracy of the marked fabric using the placement and location of the inspection marks.

25. The system according to claim 24, wherein the cutting system is further adapted to determine a position and an angle of the inspection marks relative to the specification data using a calculated position of the fabric within the cutting system.

26. The system according to claim 16, further comprising a cutting system adapted to receive the X-Y coordinate data, cut fabric according to the received X-Y coordinate data, and inspect the cut fabric using the inspection marks to re-construct imaginary X-Y axes and associated imaginary X-Y grid over the cut fabric.

27. The system according to claim 26, wherein the cutting system includes an automated cut and sew machine.

28. The system according to claim 27, wherein the automated cut and sew machine includes a recognition camera and an optional inkjet head attachment.

29. The system according to claim 26, wherein the cutting system is further adapted to, prior to cutting the fabric, mark the fabric using the X-Y coordinate data and verify the accuracy of the marked fabric using the inspection mark to re-construct imaginary X-Y axes and associated imaginary X-Y grid over the marked fabric.

30. The system according to claim 19, further comprising a sewing system adapted to sew together the cut fabric to produce the custom-made garment.

31. The system according to claim 30, wherein the sewing system is also adapted to inspect the custom-made garment using the placement and location of the inspection marks.

32. The system according to claim 29, further comprising a sewing system adapted to sew together the cut fabric to produce the custom-made garment.

33. The system according to claim 32, wherein the sewing system includes an inspection system.

34. The system according to claim 33, wherein the inspection system is adapted to inspect the custom-made garment using the inspection marks to re-construct imaginary X-Y axes and associated imaginary X-Y grid over the cut fabric.

35. The system according to claim 33, wherein the inspection system is adapted to:

scan at least one of an image of the custom-made garment in three-dimensions and three-dimensional coordinate data for the custom-made garment; and

inspect the custom-made garment using at least one of the scanned three-dimensional image and the three-dimensional coordinate data.

36. The system according to claim 35, wherein the inspection system uses an air pack system to scan the custom-made garment and to inspect the custom-made garment.

37. The system according to claim 33, wherein the inspection system is adapted to inspect the custom-made garment using the image of the marked base pattern.

38. The system according to claim 1, wherein the scanning system includes a transparent holder for holding the base pattern during scanning.

39. The system according to claim 1, wherein the computer system includes a monitor for displaying the scanned image.

40. The system according to claim 39, wherein the monitor further displays one or more of a try-on garment identifier, a base pattern identifier, a sample garment identifiers and a customer identifier.

41. The system according to claim 19, wherein the computer system includes software for controlling the scanning system and the cutting system.

42. The system according to claim 26, wherein the computer system includes software for controlling the scanning system and the cutting system.

43. The system according to claim 1, wherein the scanning system is located remotely from the computer system.
44. The system according to claim 19, wherein the cutting system is located remotely from the computer system.
45. The system according to claim 26, wherein the cutting system is located remotely from the computer system.
46. The system according to claim 1, wherein the computer system is adapted to generate the specification data from a combination of the image and manually input inspection tolerance data, the specification data representing a design of the base pattern as adjusted by tailor markings and the mark lines and in relation to a distance from the inspection marks.
47. The system according to claim 46, wherein the design of the base pattern further includes specified seam positions in relation to the inspection marks.
48. The system according to claim 46, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines, all associated with the base pattern.
49. The system according to claim 46, wherein the computer system stores the generated specification data in a database.
50. The system according to claim 47, further comprising a cutting system adapted to receive the specification data, cut fabric using the specification data of the adjusted base pattern, and inspect the cut fabric using the specification data.
51. The system according to claim 50, wherein the cutting system is further adapted to inspect the cut fabric using at least one of the design of the base pattern, the image of the marked base pattern, and the locations of the inspection marks and the mark lines.

52. A system for creating specification data for use in creating a custom-made garment, the system comprising:

- a marked base pattern containing inspection marks and mark lines, the mark lines being in accordance with preferences of the customer;
- a scanning system for producing an image of the marked base pattern; and
- a computer system that receives the image of the marked base pattern from the scanning system, wherein the computer system is adapted to generate specification data from the image, the specification data representing a design of the marked base pattern and placement and location of the inspection marks.

53. The system according to claim 52, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines, all associated with the marked base pattern.

54. The system according to claim 52, wherein the inspection marks include a reference point to indicate an intended direction of coordinate X-Y axes.

55. A system for creating specification data for use in creating a custom-made garment, the system comprising:

- a favorite garment of a customer, the favorite garment representing customer preferences;
- a transparent holder for holding the favorite garment in a two-dimensional manner;
- a scanning system for producing an image of the favorite garment; and
- a computer system that receives the image of the favorite garment from the scanning system, wherein the computer system is adapted to generate specification data from the image, the specification data representing a design of the favorite garment and placement and location of inspection marks.

56. A method for producing a custom-made garment using specification data for a customer, the method comprising the steps of:

providing a base pattern capable of accepting inspection marks and mark lines, the mark lines being in accordance with design and fit preferences of the customer;
operating a scanning system for producing an image of the marked base pattern; and
utilizing a computer system that receives the image of the marked base pattern from the scanning system and determines the locations of the inspection marks and the mark lines therefrom.

57. The method according to claim 56, wherein the computer system:
generates image data received from the scanning system in a specified file format.
58. The method according to claim 57, wherein the computer system further associates the image data with the customer.
59. The method according to claim 58, wherein the computer system further stores the image data in a database.
60. The method according to claim 56, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines associated with the base pattern.
61. The method according to claim 56, wherein the inspection marks are made using at least one of a non-erasable medium and a non-removable thread.
62. The method according to claim 56, wherein the inspection marks and the mark lines are made using a highly visible medium.
63. The method according to claim 62, wherein the highly visible medium is one of a Chako Pen, chalk and ink.
64. The method according to claim 63, wherein the Chako Pen, the chalk and the ink are each any color.

65. The method according to claim 63, wherein the highly visible medium is one of an erasable and a naturally disappearing medium.

66. The method according to claim 56, wherein the computer system generates the specification data from the image, the specification data representing a design of the base pattern as adjusted by tailor markings and the mark lines and in relation to a distance from the inspection marks.

67. The system according to claim 66, wherein the design of the base pattern further includes specified seam positions in relation to the inspection marks.

68. The method according to claim 66, wherein the specification data further represents tailor parameters, wherein the tailor parameters are manually entered into the computer system.

69. The method according to claim 66, wherein the specification data utilize a three-dimensional coordinate system.

70. The method according to claim 66, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines, all associated with the base pattern.

71. The method according to claim 70, wherein generating the specification data includes creating X-Y coordinate data of the mark lines using the inspection mark to construct imaginary X-Y axes and associated imaginary X-Y grid.

72. The method according to claim 66, wherein the computer system stores the generated specification data in a database.

73. The method according to claim 72, wherein the database further stores information about the customer, and associates the specification data with the customer.

74. The method according to claim 73, wherein the information about the customer includes at least one of a customer identifier, a try-on garment identifier, a base-pattern identifier, and a sample garment identifier.

75. The method according to claim 66, further comprising the step of using a cutting system, the cutting system receives the specification data, cuts fabric using the specification data of the adjusted base pattern, and inspects the cut fabric using the specification data.

76. The method according to claim 75, wherein the cutting system inspects the cut fabric using at least one of the design of the base pattern, the image of the marked base pattern, and the locations of the inspection marks and the mark lines.

77. The method according to claim 75, wherein the cutting system includes an automated cut and sew machine.

78. The method according to claim 77, wherein the automated cut and sew machine includes a recognition camera and an optional ink jet head attachment.

79. The method according to claim 78, wherein the automated cut and sew machine recognizes a warp/weft thread direction and a placement position of fabric placed there within using the recognition camera.

80. The method according to claim 75, wherein the cutting system is further adapted to, prior to cutting the fabric, mark the fabric using the specification data and verify the accuracy of the marked fabric using the placement and location of the inspection marks.

81. The method according to claim 80, wherein the cutting system is further adapted to determine a position and an angle of the inspection marks relative to the specification data using a calculated position of the fabric within the cutting system.

82. The method according to claim 72, further comprising the step of using a cutting system, the cutting system adapted to receive the X-Y coordinate data, cut

fabric according to the received X-Y coordinate data, and inspect the cut fabric using the inspection mark to re-construct imaginary X-Y axes and associated imaginary X-Y grid over the cut fabric.

83. The method according to claim 82, wherein the cutting system includes an automated cut and sew machine.

84. The method according to claim 83, wherein the automated cut and sew machine includes a recognition camera and an optional inkjet head attachment.

85. The method according to claim 82, wherein the cutting system is further adapted to, prior to cutting the fabric, mark the fabric using the X-Y coordinate data and verify the accuracy of the marked fabric using the inspection mark to re-construct imaginary X-Y axes and associated imaginary X-Y grid over the marked fabric.

86. The method according to claim 75, further comprising the step of using a sewing system, the sewing system adapted to sew together the cut fabric to produce the custom-made garment.

87. The method according to claim 86, wherein the sewing system also inspects the custom-made garment using the placement and location of the inspection marks.

88. The method according to claim 85, further comprising the step of using a sewing system adapted to sew together the cut fabric to produce the custom-made garment.

89. The method according to claim 88, wherein the sewing system includes an inspection system.

90. The method according to claim 89, wherein the inspection system inspects the custom-made garment using the inspection mark to re-construct imaginary X-Y axes and associates imaginary X-Y grid over the cut fabric.

91. The method according to claim 90, wherein the inspection system uses an air pack system to scan the three-dimensional image of the custom-made garment.
92. The method according to claim 89, wherein the inspection system:
scans at least one of an image of the custom-made garment in three-
dimensions and three-dimensional coordinate data for the custom-
made garment; and
inspects the custom-made garment using at least one of the scanned three-
dimensional image and the three-dimensional coordinate data.
93. The method according to claim 92, wherein the inspection system scans the custom-made garment and inspects the custom-made garment using an air pack system.
94. The method according to claim 89, wherein the inspection system inspects the custom-made garment using the image of the marked base pattern.
95. The method according to claim 56, wherein the scanning system includes a transparent holder for holding the base pattern during scanning.
96. The method according to claim 56, wherein the computer system includes a monitor for displaying the scanned image.
97. The method according to claim 96, wherein the monitor further displays one or more of a try-on garment identifier, a base pattern identifier, a sample garment identifiers and a customer identifier.
98. The method according to claim 75, wherein the computer system includes software for controlling the scanning system and the cutting system.
99. The method according to claim 82, wherein the computer system includes software for controlling the scanning system and the cutting system.

100. The method according to claim 56, wherein the scanning system is located remotely from the computer system.

101. The method according to claim 75, wherein the cutting system is located remotely from the computer system.

102. The method according to claim 82, wherein the cutting system is located remotely from the computer system.

103. The method according to claim 56, wherein the computer system is adapted to generate the specification data from a combination of the image and manually input inspection tolerance data, the specification data representing a design of the base pattern as adjusted by tailor markings and the mark lines and in relation to a distance from the inspection marks.

104. The method according to claim 103, wherein the design of the base pattern further includes specified seam positions in relation to the inspection marks.

105. The method according to claim 103, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines, all associated with the base pattern.

106. The method according to claim 103, wherein the computer system stores the generated specification data in a database.

107. The method according to claim 104, further comprising the step of using a cutting system, the cutting system receives the specification data, cuts fabric using the specification data of the adjusted base pattern, and inspects the cut fabric using the specification data.

108. The method according to claim 107, wherein the cutting system inspects the cut fabric using at least one of the design of the base pattern, the image of the marked base pattern, and the locations of the inspection marks and the mark lines.

109. A method for creating specification data for use in creating a custom-made garment, the method comprising the steps of:

- marking a base pattern to contain inspection marks and mark lines, the mark lines being in accordance with preferences of the customer;
- producing an image of the marked base pattern using a scanning system; and
- receiving the image of the marked base pattern from the scanning system with a computer system, wherein the computer system is adapted to generate specification data from the image, the specification data representing a design of the marked base pattern and placement and location of the inspection marks.

110. The method according to claim 109, wherein the inspection marks include a point of origin and at least one of a reference point and reference lines, all associated with the marked base pattern.

111. The method according to claim 109, wherein the inspection marks include a reference point to indicate an intended direction of coordinate X-Y axes.

112. A method for creating specification data for use in creating a custom-made garment, the method comprising the steps of:

- providing a favorite garment of a customer, the favorite garment representing customer preferences;
- providing a transparent holder for holding the favorite garment in a two-dimensional manner;
- producing an image of the favorite garment using a scanning system; and
- receiving the image of the favorite garment from the scanning system with a computer system, wherein the computer system is adapted to generate specification data from the image, the specification data representing a design of the favorite garment and placement and location of inspection marks.